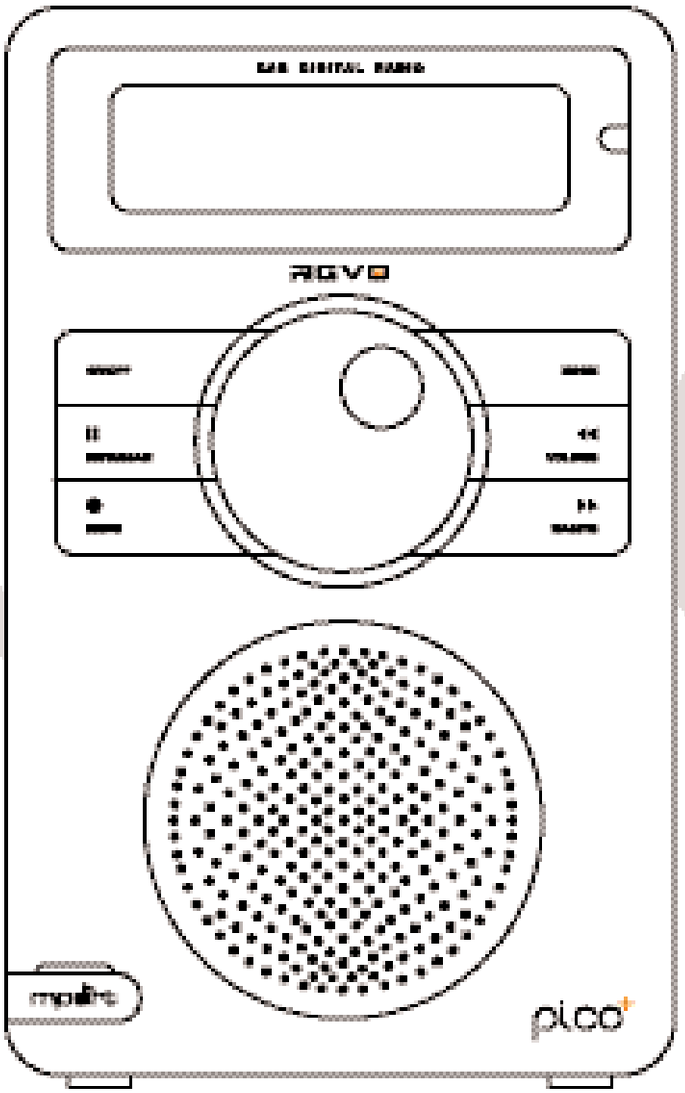
REVO®

DAB DIGITAL RADIO

DAB

Digital Audio Broadcasting



Operating Guide

Preface

Copyright and Acknowledgements

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Revo Technologies Ltd
The Inox Building
Caldwellside
Lanark
Scotland
United Kingdom
ML11 7SR

Tel. 01555 666 161
Fax. 01555 66 33 44
Email. enquiries@revo.co.uk
Website: www.revo.co.uk

The information in this guide is believed to be correct at the time of publication. However, our policy is one of continuous development and so the information is subject to change without notice.

Revo™, Pico+™ and M-Port™ are trademarks or registered trademarks of Revo Technologies Limited.

iPod® is a registered trademark of Apple Computer, Inc.

Safety Warnings

Do not operate this radio near water.
Avoid small objects and liquids from getting into this product. Do not remove screws or casing parts. Use only the power supply unit supplied.

EEC: This product has been designed and type-tested to comply with EU requirements and carries a CE mark.

When using a USB lead of over 3m with Pico+™, please ensure that according to the manufacturer's specification, it has been designed for this purpose.

RoHS COMPLIANT

Technical Support

Should you encounter any difficulties with the operation of your Revo Pico+™, or should you suspect that it may be faulty in some way, please call our technical support department on the number below:

01555 666 161

Alternatively, email support@revo.co.uk or visit the troubleshooting section of our website at: www.revo.co.uk/support

Contents

- **Welcome to Revo** **4**
  - Benefits of DAB radio 4
  - Pico+™ overview and key features 4
  - Warranty 4
  - Warranty registration 4
- **Controls and Connections** **5**
  - Powering Pico+™ 5
- **DAB Operation** **6**
  - Change display mode 7
  - Show signal strength 7
  - Finding and adding new stations 7
  - Removing ‘unavailable’ stations 7
- **Menu Options** **8**
  - To change station order 8
- **Memory Card Management** **9**
  - USB File Copy 9
  - Delete 9
  - Format 9
  - Free Space 9
- **Manual Tuning** **10**
  - Set DRC 10
  - Display software version 10
- **TimeShift™ Features** **11**
  - Pausing Live Radio 11
- Rewind/Forward Live Radio 11
  - Recording Live Radio 11
- **FM Operation** **12**
  - Station presets 12
- **M-Port™** **13**
- **Charging + Weatherproofing** **14**
  - Pico+™ Battery Information 14
  - Charging Pico+™ 14
  - Charge Management Circuit 14
  - Pico’s Splashproof Design 14
  - How Waterproof is Pico+™? 14
- **Trouble-shooting** **15**
- **Technical Specification** **16**
- **Accessories and Spares** **17**

Welcome to Revo DAB

Thank you for buying our Pico+™ DAB Digital Radio, we feel sure that it will provide you with years of enjoyment and reliable service.

This guide has been designed to quickly get you up-and-running and listening to DAB digital radio, offer guidance on the more complex features of this product and provide information on safety, warranty and registration.

Benefits of DAB Radio

- *Clear, interference free digital sound*
- *Many more stations, much more choice*
- *No frequencies, select by station name*
- *No re-tuning*
- *Text information via LCD screen*

Pico+™ Overview

Pico+™ combines high quality DAB and FM radio reception in a splashproof casing, with the convenience of internal battery power.

Pico+™ can also be used as a high quality speaker system for your iPod™ (or other MP3 player of external sound source).

Pico+™ has the ability to pause, rewind and record live radio broadcasts. Add an SD card to store and play MP3 files downloaded from your PC or Apple Mac.

Warranty

Revo Technologies Ltd warrants to the purchaser that this product will be free from parts and manufacturing defects in the course of normal use for a period of two years from the date of purchase.

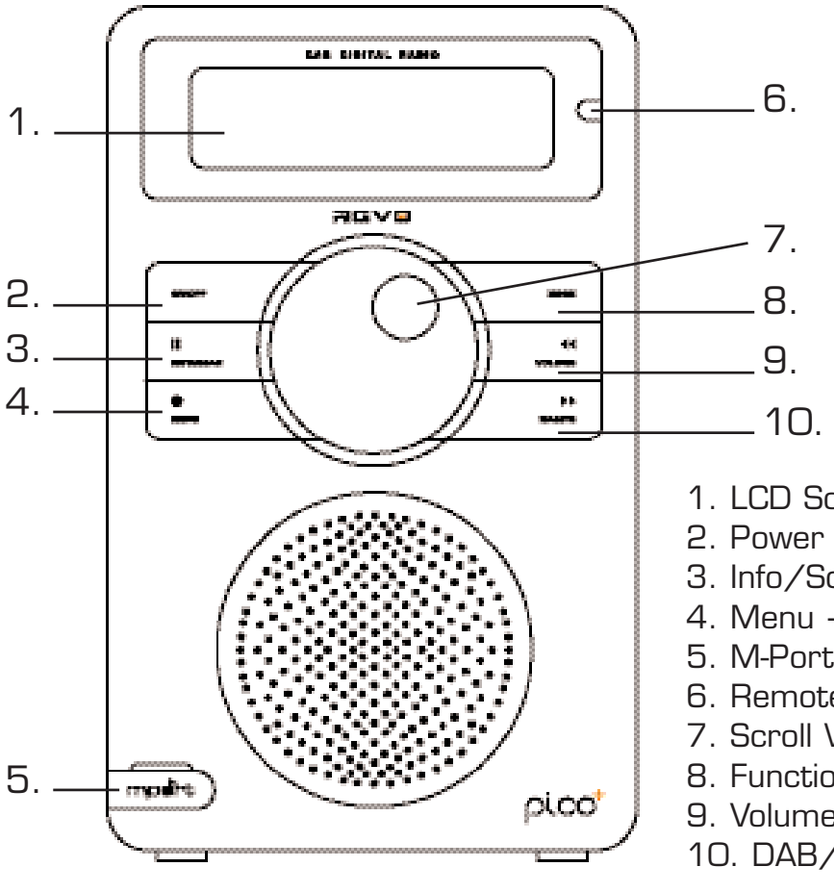
This warranty does not apply in cases of accidental damage, where the case has been removed, wear and tear, negligence, modification or inappropriate use.

Should you encounter problems with this product, please contact your supplier or alternatively see page 2 of this guide for technical support contact details.

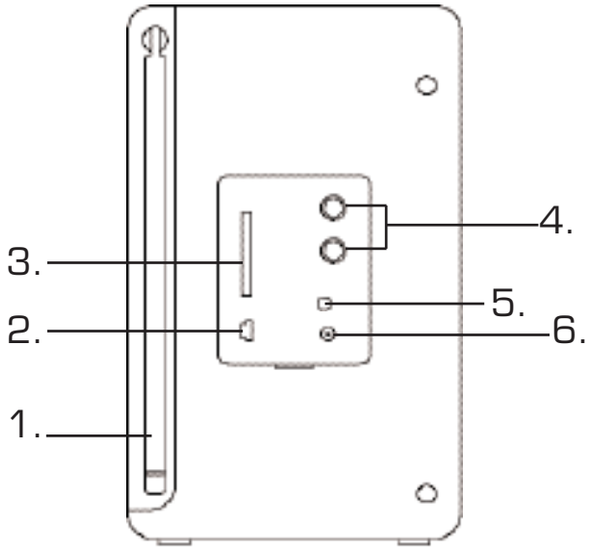
Warranty Registration

It is a warranty condition that you register your purchase by either completing the warranty card enclosed with your radio or alternatively registering online at *www.revo.co.uk/register*

Controls and Connectors



1. LCD Screen
2. Power
3. Info/Scan + Pause
4. Menu + Record
5. M-Port
6. Remote Control Sensor
7. Scroll Wheel
8. Function
9. Volume + Rewind
10. DAB/FM/MP3 + Forward



1. Telescopic Antenna
2. USB Connector
3. SD Card Slot
4. Stereo Line-Out
5. 3.5mm Headphone Socket
6. DC Power Socket

Powering Pico+™

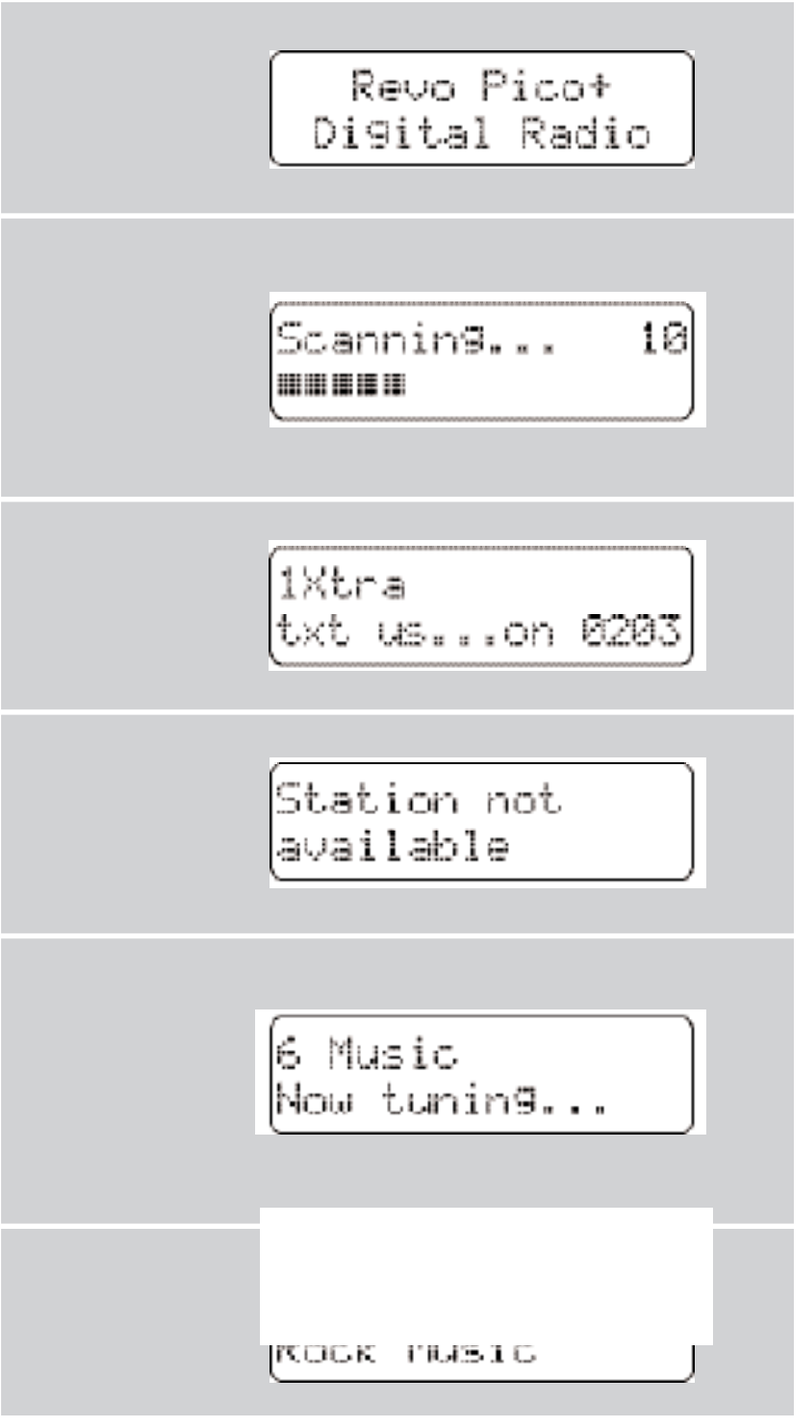
Your Pico+™ radio can be powered from the mains using the power adaptor supplied, or from it's internal battery pack.

To power from the mains, insert the power adaptor plug into the DC power socket on the rear of Pico+™. Pressing the ⏻ button will switch Pico+™ on.

Only use the power adaptor supplied. Replacements can be purchased from our website *www.revo.co.uk*, or alternatively call us on 01555 666 161.

DAB Operation

- Extend the telescopic antenna found on the rear of Pico+™.
- Press the **ON/OFF** button to switch on your radio.
- If this is the first time Pico+™ has been used, press and hold the **SCAN** button. Pico+™ will now scan for DAB stations in your area and store them in memory.
- When the station scan has been completed, stations will be displayed in numeric then alphabetic order. The first station in the list will be selected.
- If no DAB signal is found, it may be necessary for you to relocate your radio. Alternatively, visit *www.ukdigitalradio.com/coverage* to check that DAB coverage is available in your area.
- The top line of Pico+'s LCD screen shows the name of the station currently selected. Turn Pico+'s scroll wheel to cycle through the available stations. Press the scroll wheel to select the chosen station.
- To change Pico+'s volume level, press the **VOLUME** button and then rotate the **SCROLL WHEEL**. The numeric volume level will be displayed on Pico+'s screen.



To Change the Display Mode

- Pico+™ has seven different display modes.

Press the **INFO/SCAN** button to cycle through each mode.

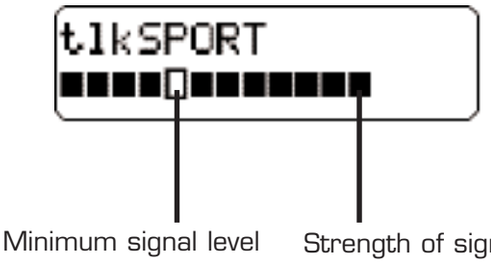
These display modes are explained in the table below:

Display option	Example
Normal display with scrolling text	BBC Radio 1 calls cost max
Type of broadcast	BBC Radio 1 Pop Music
Broadcaster	BBC Radio 1 BBC National DAB
Time and date	BBC Radio 1 12:34 22-02-2005
Station name and frequency	BBC Radio 1 12B 225.64MHz
Data rate and stereo/mono	BBC Radio 1 128kbps Stereo
Signal strength	BBC Radio 1 Sig strength 96

To Show the Signal Strength

- Press the scroll wheel.

The display shows a signal bar with the strength of the current station:



The indicator on the signal bar shows the minimum acceptable signal level.

Stations with a signal strength below this level will not provide a steady stream of good quality audio.

Finding and Adding New Stations

As time passes, new stations will become available in your area. To add them to your station list simply press and hold the **SCAN** button for at least two seconds.

Removing 'Unavailable' Stations

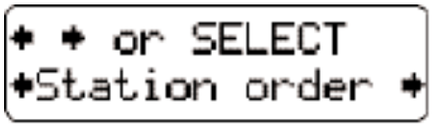
To remove 'unavailable' stations from Pico+'s station list, ie. those that display a ? before the station name, see the 'Menu Options' section on page 8.

Menu Options

Pico+™ has a number of functions that are accessed through the **MENU** button.

To change station order

■ Press **MENU**, then turn Pico+'s scroll wheel until the name of the option is displayed:



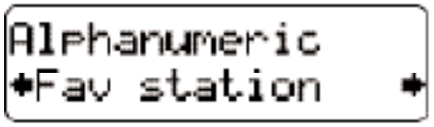
■ Press the scroll wheel to select your choice.

To specify the order in which stations are displayed

Select the **Station order** option.

■ The top line of the display shows the currently selected station order and allows you to change it.

Turn the scroll wheel to step between the station order options:



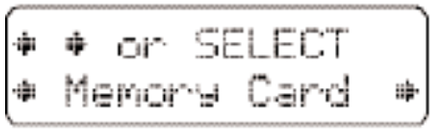
Press the scroll wheel to select the current option.

The following table describes the options available under the 'Station Order' menu:

Station order	Description
Fav station	Lists the most frequently selected stations first.
Alphanumeric	Displays all stations in alphanumeric order.
Active station	Lists active stations [ones that are currently broadcasting] before inactive ones.
Prune stations	Remove inactive stations from the station list.

Memory Card Management

- Press **MENU**, then turn Pico+'s scroll wheel until 'Memory Card' is displayed.

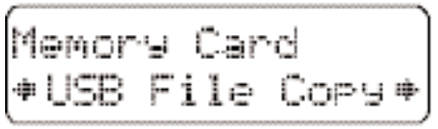


Press the **SCROLL WHEEL** to select.

The following options will be available:

USB File Copy

Used to transfer MP3 files to Pico+™ and for transferring recorded radio broadcasts (in MP2 format) from Pico+™ to your PC/Mac. Please note, an SD card must be in place to use this feature.



To transfer files between Pico+'s SD card and your PC/Mac, connect your computer to Pico+™ using a suitable USB lead.

Select **USB File Copy** from the Memory Card menu. On a PC, a mass storage device icon named "Pico+" will appear on your desktop (this is the SD card located inside Pico+™). An empty folder named "TRACKS" is located on this device.

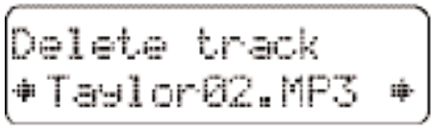
You can now drag and drop MP3 files to this folder, or transfer files in the opposite direction - from Pico+'s SD card to your computer.

On an Apple Mac computer the procedure is the same, though Pico+'s SD card will appear on your desktop as "Untitled".

Please remember that in order to access Pico+'s SD card for any reason, Pico+™ must be in **USB File Copy** mode.

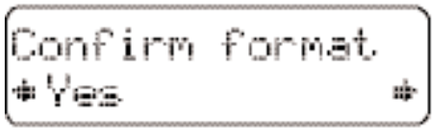
Delete

Used to delete MP3 files or recorded radio broadcasts on the SD card. Follow on-screen instructions.



Format

Use this function to prepare your SD card for use with Pico+™.



Free Space

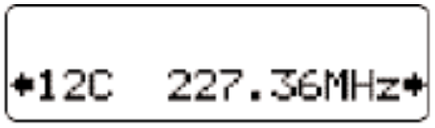
Shows the amount of available memory on your SD card.

IMPORTANT:
It is essential that you format your SD card **before** attempting to record or drag files to it.

To use manual tuning

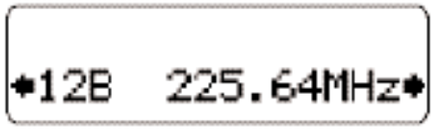
■ Select the **Manual tune** option.

The display shows the current station number and frequency:



■ Press ◀ or ▶ to step between the stations and press **SELECT** to select the current station.

If there is a station corresponding to this station number and frequency the display will show the station name, and a tuning meter showing the signal strength.



To set the dynamic range control

Pico+™ includes a dynamic range control that automatically boosts the volume of quieter sounds for listening in noisy environments.

■ Select the **DRC value** option.

The display shows the current DRC value and allows you to adjust it:

The DRC value can be switched between the following options:

DRC	Description
DRC 0	Dynamic Range Control is switched off
DRC 1/2	Dynamic Range Control is set to half normal level.
DRC 1	Dynamic Range Control is switched on; the default setting recommended for noisy environments.

To display the software version number

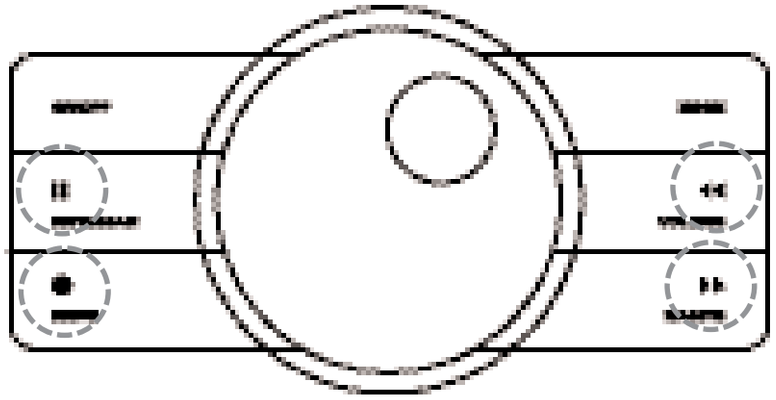
■ Press the **MENU** button then use the ◀ and ▶ buttons to scroll across to **SW VERSION**. The software version number is displayed on the top line of the display. You should specify this when speaking to Revo Technical Support.

TimeShift™ Features

Pico+™ incorporates our advanced TimeShift™ system.

TimeShift™ allows the user to pause, rewind and record live radio - simply, and at the touch of a button.

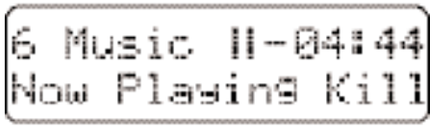
TimeShift™ features are highlighted in orange on Pico+'s keys and are accessed by holding down the **FUNCTION** button and pressing either ||, Ⓡ, ◀◀ or ▶▶.



PAUSING live radio
Pico+™ constantly stores audio from the station you are tuned to - allowing you to pause or rewind for up to 30 minutes. When Pico+'s memory is full, the oldest stored audio is overwritten.

To pause live radio press and hold the **FUNCTION** button then press ||.

Pico+'s display will tell you how far behind the live broadcast you are.



REWIND/FORWARD live radio
Press and hold the **FUNCTION** button then either ◀◀ or ▶▶ to rewind or forward through the audio held in memory.

RECORDING live radio
Press and hold the **FUNCTION** button then press Ⓡ.

Pico+™ will start to record the broadcast until **FUNCTION** + Ⓡ are pressed again to halt recording.

The recording will then be saved to Pico+'s SD card with the filename DAB000.MP2.

Further recordings will be named DAB001.MP2, then DAB002.MP2 etc.

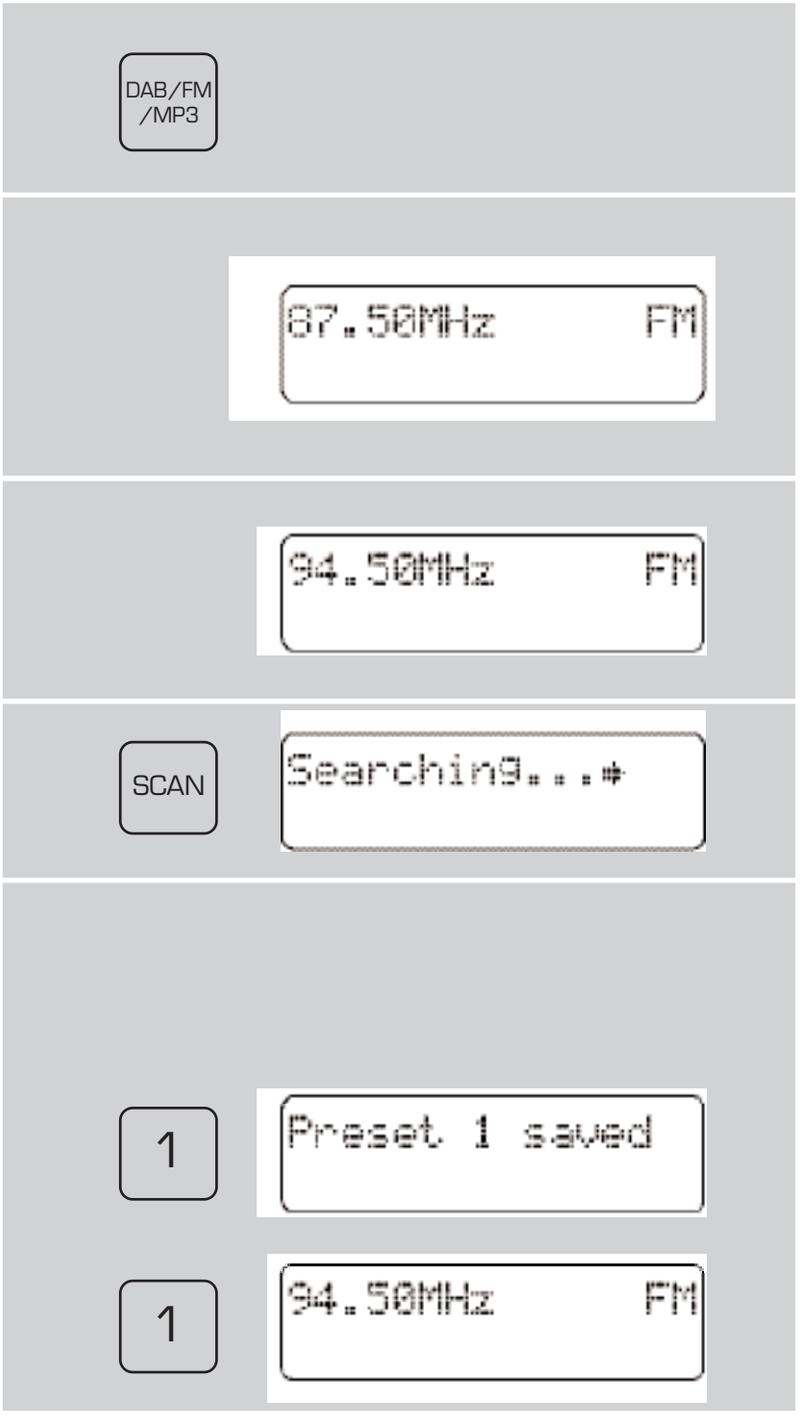
FM Operation

- To select FM radio, press the **ON/OFF** button to switch Pico+™ on, then press the **DAB/FM/MP3** button.

- If this is the first time Pico+™ has been in FM mode, it will start at the beginning of the FM frequency range. Otherwise, the last FM station you were listening to will be selected.

- To scan through the FM frequency range turn Pico+'s scroll wheel clockwise or anti-clockwise. To select the current frequency, press the scroll wheel.

- To 'SEEK' the next active station, press and hold the **SCAN** button.



Station Presets

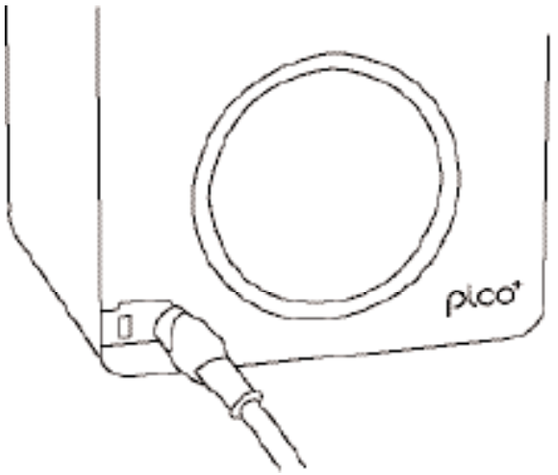
- Pico+™ can store up to five favourite FM stations as presets via its remote control.

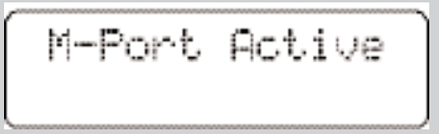
- To store the current station press and hold one of the preset buttons (1 - 5) on your remote control. To select a stored FM station, simply press the corresponding preset key (1 - 5).

M-Port™

Using M-Port™

- Revo's M-Port™ technology allows for quick and easy connection of an iPod® (or other MP3 player or external sound sources).
- Using the connection lead supplied, Pico+™ is transformed into a high quality digital audio speaker system.
- Connect one end of the supplied audio lead to the headphone (or auxiliary out) socket of your source device, then connect the other end to the M-Port™ on the front of Pico+™.
- Pico+'s LCD screen will now display the words "M-Port Active".
- You should adjust the output volume level on both the source device and on Pico+™ itself to gain optimal volume levels and sound performance.





Charging + Weatherproofing

Pico+™ Battery Information

■ Inside Pico+™ there is a rechargeable Nickel Metal Hydride battery pack. Out-of-the-box this may carry a small amount of charge, but it is suggested that you perform a full charge before using Pico+™.

Charging Pico+™

■ Ideally Pico+™ should initially be charged overnight before being used.

■ Thereafter a full charge will take approximately four hours.

■ It can take 3 or 4 charges before Pico+'s internal batteries are performing at their optimum level.

■ Pico+™ charges it's batteries whenever it is plugged into the mains, whether it is being used at the time, or switched off.

Charge Management Circuit

■ Pico+™ has a charge management circuit that ensures that it's battery is never over-charged. When the batteries have taken a full charge, Pico+™ will automatically stop charging them.

Pico+'s Splashproof Design

■ Pico+'s case is sealed against the elements, allowing Pico+™ to be used outdoors, or in places where there is moisture, such as a bathroom.

How Waterproof is Pico+™ ?

■ Pico+™ has been designed to withstand small splashes of water, such as raindrops. It is not designed to be submerged in water.

Trouble-Shooting

Q. I hear a 'burbling' noise on some stations.

A. If the signal strength is too low, a break-up in reception can occur. This sound is the result. Make sure that Pico+'s antenna is fully extended and in an upright position. If the problem persists, move Pico+™ to another location or check that you are in an area where reception of this station is possible (visit www.ukdigitalradio.com/coverage to check).

Q. I get a '?' before some stations in my station list, and don't seem to be able to select them.

A. '?' before a station name means that it is either inactive or unavailable. This can be because they are not currently broadcasting, you are outside their broadcast area or you have simply lost reception. To remove inactive or unavailable stations press the **MENU** button and go to the 'Prune Stations' option (available through the Station Order menu), see page 8.

Q. I get a 'No stations available' message?

A. Make sure that your antenna is fully extended and vertical. Check the signal strength and move Pico+™ to another location if necessary.

Q. Sometimes when I'm listening to Pico+™ the volume dips slightly and the sound becomes distorted.

A. A loss of volume, sound quality and/or reception sensitivity usually indicates that Pico+'s internal battery needs to be charged.

Q. Even after I've given Pico+™ a full charge, the battery doesn't seem to last very long. Certainly not as long as it used to.

A. It sounds like Pico+'s internal battery needs to be replaced. Replacement batteries are available as a spare part, see page 17 for details.

Q. My Pico+™ seems to have frozen and I can't get it to do anything.

A. Sounds like Pico+'s software has 'crashed'. To perform a 'software reset', press and hold the **MENU** button and follow the on-screen instruction. This should solve the problem. If not, please call our technical support department on 01555 666 161.

Technical Specification

General:	Mono DAB and FM radio with Band III reception, pause, rewind (30 minutes) and record live radio. Storage and playback of MP3 files.
Speaker:	2” Weatherproof, full-range neodymium, 8W power handling.
Audio Power Output:	2W
Frequency Ranges:	DAB Band III (174 - 240 MHz) - FM (87.5 - 108 MHz)
Antenna:	Integral telescopic aerial.
Input Connectors:	DC power adaptor socket (230V adapter supplied). 3.5mm line-in for auxiliary devices (M-Port). Mini USB for connection to PC/Apple Mac. SD card slot for storage of recorded radio or MP3 files.
Output Connectors:	3.5mm headphone socket and stereo RCA line-out.
LCD Display:	High resolution 2 x 16 character negative display.
Controls:	Power, left, right, select, volume up/down, alarm, scan/info, menu, DAB/FM
Weatherproofing:	‘Splashproof’ case design.
Remote Control:	Infra-red remote control.
Mains Power Supply:	12V 1.2mA
Battery Power:	Nickel Metal Hydride – 12 hour life (average)
Approvals:	CE marked and RoHS compliant.
Dimensions:	167mm (H) x 103mm (W) x 98mm (D)

Accessories and Spares

The following optional accessories and spare parts are available for Pico+™. Please contact your local retailer or alternatively call us on 01555 666 161. Accessories and spare parts can also be purchased online at *www.revo.co.uk*

Remote Control:

Control Pico+™ with our compact infra-red remote control.

Mains Power Supply Unit:

Replacement power supply as supplied with Pico+™.

M-Port™ Lead:

Used to connect an iPod® (or similar device) to Pico+™.

Protective Carry Case:

Keep Pico+™ safe and sound with our custom made protective case.

In-Car Power Cord/Charger:

Charge or power your Pico+™ from your vehicle's cigarette lighter socket with this handy accessory.

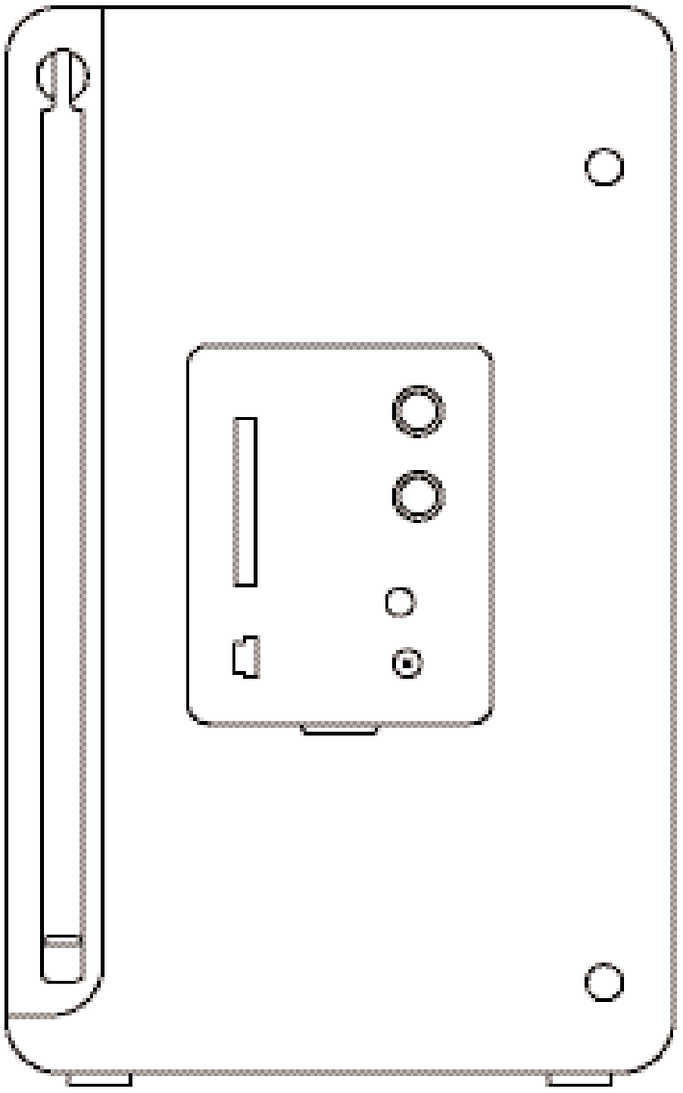
SD Storage Card:

For storage of recorded radio broadcasts or MP3 music files. Available in a variety of memory sizes.

Notes

Notes

DAB DIGITAL RADIO



Revo Technologies Ltd The Inox Building Caldwellside Lanark Scotland United Kingdom ML11 7SR

Telephone Support *01555 666 161*

Online Support *www.revo.co.uk/support* *support@revo.co.uk*